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More Similar than Different: Millennials in the U. S. Building Trades

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Abstract
Purpose The objective of this study is to investigate the extent to which generational differences exist among skilled workers within a single construction trade. Although Millennials have been the focus of attention in media reports and popular management literature, little attention has been paid to empirical examinations of skilled trade workers.
Design/Methodology/Approach This study examined the workplace beliefs and values of three generations of workers within a national sample of skilled construction workers in the United States. A random sample ($N = 2{,}581$) of workers belonging to a national building trades union responded to a survey about work ethics, job values, and gender beliefs. Additionally, focus groups were conducted in five U.S. cities in order to develop a richer understanding of this phenomenon.
Findings Results from this study found few meaningful quantitative differences between generations. Millennial workers were more similar than different from other generations in their work beliefs, job values, and gender beliefs. Differences elicited in focus groups were more likely the result of experience, position, or age than generation.
Implications These findings suggest that construction firms should avoid policies and procedures based on generational differences for their skilled trade workers. Instead, firms should focus on practical strategies directed toward communicating and working with younger workers.
Originality/Value The results point to the importance of occupational communities, social class, and other factors in understanding Millennials. These workers are different from the college students or white collar workers used in much prior generational research.

Keywords Generational research · Millennial workers · Work ethic · Job values · Gender beliefs · Occupational communities

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The examination of generational differences in the workplace has drawn the attention of media, popular press authors and scholars. However, the notion of generational differences has drawn mixed support and there is a need for more studies to determine whether in fact substantial differences do exist. Moreover, much prior generational research is based on samples limited to college-bound adolescents, college students, or white-collar workers. Few studies have examined the work-related values and beliefs of workers from blue-collar occupations. Indeed, we know of no study that has examined work-related generational differences of skilled trade workers in the United States. As such, claims of generational differences have been limited by sample selection and other factors, leaving broad judgments about entire generations open to skepticism and criticism (Giancola 2006). This study contributes to generational research by examining the work ethics, job values, and gender beliefs of three generations of skilled construction workers within the same industry. The goal of

this study is to understand the extent to which Millennial workers are different from other generations of workers in the U. S. construction/building trades industry.

Generation as Key Construct

A generation can be characterized as an identifiable group that shares common age groupings and has experienced similar historical events at critical stages of development (Kupperschmidt 2000). Accordingly, individuals in the same generational cohort may have similar values, beliefs, and behaviors due to a common location in history and shared sense of membership within a particular generation. For example, Millennials may have experienced a distinct set of social, cultural, and economic events that shaped their formative years, including the immersion of communication technologies into everyday life and changes to the economic social contract (Uchitelle 2006; Wong et al. 2008).

Each generation is said to have social, economic, political, and other contextual factors that shaped their values and beliefs about work. Baby Boomers (1946–1964), for example, were raised in an era of economic growth that included the unwritten social contract that workers would be rewarded by their employer in terms of job stability, pay, opportunity, and retirement if they worked hard (Smola and Sutton 2002). Generation X (1965–1979), on the other hand, encountered economic instability in their formative years due to downsizing and shifting economic tides, thus providing them with a different view of the social order of things than did the previous generation (Kupperschmidt 2000; Smola and Sutton 2002). Millennials (1980–2000) have only recently entered the full-time workforce and many unanswered questions remain about this group in terms of values and beliefs about work.

Recent empirical work has begun to examine Millennials in systematic ways. For example, Twenge and Campbell (2008) found that that Millennials have higher levels of narcissism, anxiety, depression, lower needs for social approval and a stronger external locus of control than do prior generations. Other recent research suggests that there are few generational differences over personality and motivational drivers in the workplace (Wong, et al. 2008), or work values (Cennamo and Gardner 2008). Similarly, Dries et al. (2008) found little differences across generations regarding evaluations of career success or preferences for career type. On the other hand, D'Amato and Herzfeldt (2008) found generational differences in learning orientation and leadership development intentions that had implications for organizational commitment and intentions to stay with an organization. Although these studies found mixed results, they all share two common traits. First, each is excellent in research design/analyses/findings and, second, each relies almost exclusively on samples of college-oriented individuals.

The lack of empirical research involving working-class or blue-collar workers is a major shortcoming in the current scholarship of generations in the workplace. According to Reeves and Oh (2008), virtually no empirical research can be found that addresses generational differences among those who will not enter higher education and work in jobs that do not require a bachelor's degree. This study examines generational differences among skilled workers in the construction/building trades industry.

Fundamental Work Values and Beliefs

There are many ways in which work values, attitudes, and beliefs can be examined. In this paper, we focus on three fundamental areas: work ethic, job values, and workplace gender issues. The first area, work ethic, has long been considered a crucial element explaining individual behavior at work (Cherrington 1980; Miller et al. 2001; Weber 1958). Miller et al. (2001) suggest that work ethic encompasses a constellation of attitudes and beliefs, including hard work, centrality of work, self reliance, and attitudes toward leisure, wasted time, morality/ethics, and delay of gratification. These factors are important, as productivity of construction workers has long been an important concern to contractors and other stakeholders (Maloney 1983; McFillen and Maloney 1988). Craft workers have also been found to have a good understanding of the factors affecting their daily productivity (Dai, Goodrum and Maloney 2009). However, it is not clear if worker productivity differs as a function of generation in the building trades. This leads to the first research question of the study:

RQ1 Do Millennial workers have a different work ethic than other workers in the construction/building trades industry?

A second fundamental area of work-related beliefs to consider is job values, which have implications for behavior, commitment, retention, and satisfaction (Johnson 2001; Kalleberg 1977). Early research tended to identify job values as they related to intrinsic and extrinsic rewards (Johnson 2001). Intrinsic job values include having an interest in the work, opportunity to be creative, seeing the results of work, and using one's skills. Extrinsic values typically involve pay, occupational status, and opportunities for advancement (Johnson 2001). Research has also examined job values pertaining to altruistic rewards (e.g., the opportunity to help others), social rewards (e.g., the

opportunity to make friends) and how these are distinct from intrinsic/extrinsic rewards (Johnson 2001; Johnston et al. 2004). It is not known whether workers in the building trades have different job values based on their generation membership. This leads to the second research question:

RQ2 Do Millennial workers have different job values than other workers in the construction/building trades industry?

A third fundamental area in which to examine generational differences involves attitudes and beliefs about gender in the workplace (Anker 1997; Stewart and McDermott 2004). Although limited, prior research suggests that both gender and generation may be important to the study of values and "should not be considered in isolation of each other" (Lyons et al. 2005, p. 763). Male blue-collar workers' perceptions of gender issues have relevance (Kolmet et al. 2006) and many male construction workers hold traditional conceptions of masculinity (Iacuone 2005). Males also continue to be dominant in construction, where the average percentage of women employed within the trades is 4.1% (Menches and Abraham 2007). As such, it is not clear whether attitudes and beliefs about gender are related to generation. This forms the basis for the third research question:

RQ3 Do Millennial workers have different attitudes and beliefs about gender issues than other workers in the construction/building trades industry?

Method

Data for this study were derived from surveys and focus groups conducted in 2006 from a national sample of workers in the U. S. construction/building trades industry.

Sample and Procedures

A systematic, stratified random sample of 8,000 workers was drawn from a membership list supplied by a national building trades union. The sample was created from the larger membership list by first dividing it into two categories, one for apprentices and one for journey-level workers, and then selecting every fifth member from each category. This was followed until a sample of 3,000 apprentice and 5,000 journey-level workers was created. More journey-level workers were sampled because they were sent a mail survey, which has historically lower response rates. Apprentices were asked to complete a questionnaire during an apprentice class; others were mailed a questionnaire to their home address. From this group, 2,581 usable responses were returned for an overall response rate of 32.3%. The difference between mail survey and in-person response rates was stark. Response rate from journey-level workers was 18.5% (927 of 5,000) while the response rate from apprentices was 51.8% (1,553 of 3,000). Respondents came from nine geographic regions comprising all 50 states and the District of Columbia. All surveys were anonymous.

After survey data were collected, 15 focus group discussions were conducted in five cities: Denver, Los Angeles, Louisville, Philadelphia, and Portland. In each city, there were three group interviews, one for each of the three generations, with six in each group. Participants were not paid and were recruited in each city with the assistance of the union leadership. Sessions lasted on average between 1.5 and 2 h and the data were recorded and transcribed. Each focus group was facilitated by a member of the research team. These focus groups were aimed at developing a better understanding of Millennials in light of the specific results of the survey data. The interaction and feedback within focus group discussions lead to a broad array of responses that provided opportunities to interpret the meaning of survey responses. The focus group data afforded a qualitative extension of the central topics measured in the survey.

Survey Measures

The Multidimensional Work Ethic Profile (Miller et al. 2001) assesses a constellation of beliefs and attitudes related to the work ethic construct. The Multidimensional Work Ethic Profile (MWEP) is a 65-item measure that encompasses seven dimensions of work ethic (Miller et al. 2001). Responses for all 65 items ranged from "strongly disagree" (1) to "strongly agree" (5). The first of these dimensions, *hard work*, was assessed with ten items, including "By working hard a person can overcome every obstacle that life presents" and "If you work hard you will succeed". *Self reliance* was measured with ten items, such as "I do not like having to depend on other people". A third dimension, *leisure*, measured attitudes toward time off and relaxation activities. This factor was assessed with ten questions, including "More leisure time is good for people". *Centrality of work* gauged the importance of work in the respondent's life with ten items, such as "Even if it were possible for me to retire, I would still continue to work".

A fifth dimension, *morality/ethics*, assessed moral aspects of individuals, as Weber (1958) suggested that high ethical standards were considered to be the hallmark of well-regarded industrious individuals. Ten items measured this factor, including questions such as "People should be fair in their dealings with others". Attitudes toward the constructive use of time (*wasted time*) comprised the sixth dimension, with eight items that included "I feel content

when I have spent the day working". *Delay of gratification*, the seventh and final dimension of the MWEP, incorporates orientation toward the future. Seven items measured this dimension, including "I get more fulfillment from items I had to wait for". Because these scales were constructed and validated using mostly college student samples, a factor analysis was conducted to assess nomological validity for the sample used in this study.

A second aspect of work-related attitudes and beliefs involves the importance that workers attach to specific *job values*. Twenty-three items were drawn from a *Monitoring the Future* study (Johnston et al. 2004). Respondents in this study were asked to indicate the importance they attached to each job-related characteristic. Responses for all 23 items ranged from "not important" (1) to "very important" (4). These characteristics ranged from "a job that has high status" to "a job that is interesting" to one in which the "chances for advancement were good" to "a job that gives you a chance to make friends". The Monitoring the Future studies primarily assessed young people; as such, these items were subjected to factor analysis to determine internal consistency and discriminant validity.

Attitudes toward gender were assessed with 17 items primarily derived from a *Monitoring the Future* study (Johnston et al. 2004). A few items were added that related to women working in construction. Seven items gauged beliefs about the extent women are discriminated against matters such as "getting equal pay for equal work". Responses for these items ranged from "not at all" (1) to "great deal" (5). Another ten questions measured gender equity issues related to work and family matters with items such as "a woman should have exactly the same job opportunities as a man" and "a preschool child is likely to suffer if the mother works". Responses for these ten items ranged from "strongly disagree" (1) to "strongly agree" (5). These items were subjected to factor analysis in order to detect the structure of relationships between variables.

A number of demographics were measured in this study, including age, position, years of experience in the building trades, and more. *Generation membership* was determined by age of respondent. Millennials were those born in the period 1980–2000 (age 18–26), generation X were those born 1965–1979 (age 27–41), and Baby Boomers were those born 1946–1964 (age 42–60). We recognize that there is no consensus view yet on the best definition of the Millennial generation. The ranges in this study are similar to age groupings in Cherrington's (1980) work ethic study and generational groupings in Smola and Sutton (2002).

Statistical Analysis

Principal component analyses with iteration and varimax rotation were employed to explore the structure of the subscales through item analysis in order to create multiple scales with high internal consistency, good discriminant validity, and scale validation. Exploratory factor analysis (EFA), which makes no a priori assumptions about the structure of the subscales, was conducted because the items used had been drawn from different sources and different samples in prior research. Specifically, the *Monitoring the Future* studies draw primarily from adolescents, high school and college students and many MWEP studies have relied on college student samples as well. A sample of skilled workers in the construction industry is distinct from these other populations. Retention criteria used during the EFA process, included eigenvalues >1.0, Catell's scree plot, item loadings >.6 (i.e., the item loading on the appropriate factor exceeded .6 and that it did not load on any other factor with a loading greater than .4), and theoretic interpretability of the final factor structure (Thompson 2004). Addressing the research questions for this study was accomplished by using multivariate analysis of variance (MANOVA) in order to account for multiple dependent variables. Levene's test for homogeneity of variances was employed. Where significant differences were found, post-hoc tests were conducted. In cases where variances were homogeneous, data were analyzed using Hochberg's GT2 test, otherwise, group differences were analyzed using the Games and Howell test.

Focus Group Analysis

To afford a greater understanding of the survey results, focus group data were analyzed using a grounded theory, thematic analysis approach (Strauss and Corbin 1998). Because the focus group discussions involved the main topics of the survey (work ethic, job values, gender beliefs) in regard to Millennials, the analysis was guided by this framework. A grounded theory framework provides a robust analytical approach that allows for intersubjective interpretation of qualitative data in light of existing research questions (Strauss and Corbin 1998). Analysis consisted of multiple readings of the data followed by identification of the basic thematic topics found in the data. The majority of the topics developed in the analysis were related to work ethic, specifically hard work, centrality of work, and self reliance. A smaller number of comments related to motivation, values, and gender.

Results

Sample Characteristics

The sample consisted of 762 Millennials, 1,012 Generation X, and 742 Baby Boomer-era workers. A small number of

workers in the sample (44) were older than Boomers and 21 respondents did not list their age. These respondents were not included in the analyses. The sample was 95.4% male (2,462), 77.6% Caucasian (2,003), and 55.1% married (1,421). Fifty-five percent (1,426) of these workers had a relative working in construction. Sixty percent (1,553) of the sample were apprentices. Years of experience ranged between zero and 56 years ($M = 10.93$, SD = 11.37).

Structural Validity and Reliability

Principal component analyses (PCA) were employed in order to create subscales with good discriminant validity and high internal consistency. Items found to be unrelated to any factor, had high loadings on several factors, or did not meet the criteria for factor retention were removed. For the MWEP (Miller et al. 2001), this resulted in a 7-factor structure comprising 48 items. The first factor, *leisure*, consisted of ten items involving workers' beliefs about time off and relaxation ($\alpha = .90$). The second factor, *morality/ethics*, contained seven items that measured beliefs about how to operate in a fair and just manner in relationships with others ($\alpha = .83$). *Hard work*, the third factor, was composed of nine items ($\alpha = .87$). The fourth factor, *self reliance*, comprised eight items that assessed attitudes about independence ($\alpha = .80$). Attitudes toward *wasting time* was the fifth factor and this consisted of six items that gauged the constructive use of time ($\alpha = .78$). The sixth factor assessed *centrality of work* in one's life with four items ($\alpha = .84$). The seventh and final factor, *delay of gratification*, measured workers' attitudes toward postponement of rewards ($\alpha = .80$).

A PCA of job values (Johnston et al. 2004) resulted in a 2-factor structure comprised of 11 items. The first factor, *intrinsic job features*, measured the extent to which workers believed it was important to have a job "which is interesting to do", and "where you can see the results of what you do" with five items ($\alpha = .73$). The second factor, *social aspects of work*, assessed sociability and status elements of work with six items. These included having a job that "permits contact with a lot of people", "most people look up to and respect", and "gives you a chance to make friends" ($\alpha = .75$).

Finally, workers' attitudes toward gender (Johnston et al. 2004) were subjected to PCA, which resulted in a 3-factor solution comprised of 15 items. The first factor, *discrimination against women*, assessed beliefs about the extent that women are discriminated against "in obtaining top jobs in the professions" and "in getting executive positions in business" with seven items ($\alpha = .89$). The second factor, *gender equity at work*, measured beliefs about whether "men and women should be paid the same money if they do the same work" with five items ($\alpha = .82$). The third factor, *gender equity at home*, measured beliefs about whether "a working mother can establish just as warm and secure a relationship with her children as a mother who does not work outside the home" with three items ($\alpha = .69$).

Research Questions

Multivariate analysis of variance (MANOVA) was conducted to investigate the extent to which Millennials differed from other generations in their work-related beliefs. The specific goal of the focus groups was to further understand the nature of the quantitative findings.

Work Ethics

The first research question asked whether Millennials would have different work ethics than other generations of workers. To assess this, MANOVA was conducted to identify the impact of generation membership on the seven scales of the MWEP. Because Box's test of equality of covariance matrices was significant, Pillai's trace statistic was used due to its robustness in the face of violations of homogeneity of variance and unequal sample sizes (Tabachnick and Fidell 2006). The multivariate test of overall differences show that generational differences existed for the MWEP (Pillai's Trace = .161; df = 14; $p < .001$). Univariate between-subjects tests indicate that each of the MWEP scales differed significantly by generation (see Table 1). Post-hoc tests show that Millennials scored higher in *hard work* and *centrality of work* and lower in *morality/ethics* and *wasting time* than both Generation X and Baby Boomers. Post-hoc test show that Millennials scored higher in *leisure*, *self reliance*, and *delay of gratification* than Baby Boomers, with no differences found between Millennials and Generation X. While these results were statistically significant, the differences were both small and in unexpected directions, suggesting that any differences were of little practical significance.

Data from the focus groups was mixed. In general, the discussion by each generational group pointed to the positive work ethic of Millennials, however, there were a number of statements by older workers that cast younger Millennials in a negative light. Many comments by Millennials indicated the need to work hard in order to succeed in their apprenticeship. One even compared the apprenticeship to college: "*If we fail out of this class, we're out. If you fail a class in college, you just take more classes. So we can't not work hard*". Another suggested that work ethic depends on the person:

> I am not personally lazy, but I know a lot of young people who are. I am also overseeing young and older

Table 1 Mean differences (MWEP, job values, gender) between generations

Dimensions	Generation	*N*	Mean (SD)		df	*F*-value
Hard work	Millennials	750	3.94 (.63)	Between groups	2	27.11***
	Gen X	997	3.82 (.65)	Within groups	2473	
	Boomers	729	3.70 (.60)	Corrected total	2475	
Centrality of work	Millennials	750	3.39 (.94)	Between groups	2	18.39***
	Gen X	997	3.23 (.99)	Within groups	2473	
	Boomers	729	3.09 (.94)	Corrected total	2475	
Morality/ethics	Millennials	750	4.14 (.59)	Between groups	2	78.33***
	Gen X	997	4.26 (.57)	Within groups	2473	
	Boomers	729	4.48 (.42)	Corrected total	2475	
Wasting time	Millennials	750	4.23 (.57)	Between groups	2	12.83***
	Gen X	997	4.29 (.55)	Within groups	2473	
	Boomers	729	4.37 (.43)	Corrected Total	2475	
Leisure	Millennials	750	3.24 (.72)	Between groups	2	21.98***
	Gen X	997	3.23 (.71)	Within groups	2377	
	Boomers	729	3.03 (.62)	Corrected total	2379	
Self reliance	Millennials	750	3.61 (.59)	Between groups	2	5.36**
	Gen X	997	3.55 (.61)	Within groups	2377	
	Boomers	729	3.38 (.66)	Corrected total	2379	
Delay of gratification	Millennials	750	3.52 (.75)	Between groups	2	7.70***
	Gen X	997	3.45 (.74)	Within groups	2377	
	Boomers	729	3.38 (.66)	Corrected Total	2379	
Intrinsic job features	Millennials	759	3.47 (.47)	Between groups	2	3.93*
	Gen X	1009	3.45 (.46)	Within groups	2502	
	Boomers	737	3.40 (.47)	Corrected total	2504	
Social aspects of work	Millennials	759	2.58 (.64)	Between groups	2	36.45***
	Gen X	1009	2.41 (.63)	Within groups	2502	
	Boomers	737	2.31 (.57)	Corrected total	2504	
Discrim against women	Millennials	750	2.36 (.95)	Between groups	2	14.14***
	Gen X	995	2.52 (.89)	Within groups	2469	
	Boomers	727	2.61 (.83)	Total	2471	
Gender equity work	Millennials	750	4.04 (.76)	Between groups	2	9.63***
	Gen X	995	4.13 (.68)	Within groups	2469	
	Boomers	727	4.20 (.59)	Total	2471	

Descriptive statistics and univariate tests from MANOVA

* $p < .05$, ** $p < .01$, *** $p < .001$

> people, it does depend on the individual but some work their [butts] off. Most young people do have a strong work ethic. But sure there are some who party too much; a lot of young people don't care.

Some older workers described Millennials in positive ways, as one Boomer said: "There's lot's of energy, they bounce off the walls in one direction and onto the other wall. What you gotta do it take em and teach them how to use that energy in the right way". However, the descriptions of Millennials by Gen Xers or Boomers were not all favorable, with some expressing opinions such as "They don't put the effort out that they should" and "Their work ethic sucks".

These mixed sentiments applied to the centrality of work and self reliance as well. Many Millennials described a 'work to live' motif that described the degree to which work was central to their lives. One young worker put it this way: "Work is a way for me to get to do what I really love, which is banging out motorcycles". Generation X and Baby Boomer participants were more negative about Millennials especially in comparison to the past. One Xer said, "If someone[in the past] said to us get me a toolbox you'd do it. Today, kids don't jump when you tell em to jump." As seen in Table 2, responses were mixed as to the centrality of work for Millennials.

Table 2 Focus group exemplars

Dimension	Generation	Responses
Hard work	Millennials on Millennials	Let's talk about hard work. It's the only type of work worth doing in the first place. This is hard but not as hard as some people think. I would rather go to work and come home exhausted than go to work and be bored all day long. Sitting at work…nah, I'd rather bust my ass all day long than be bored
	Gen Xers on Millennials	I'm glad for them (the youngest workers). They need to be steered in the right direction—they're hungry, they can work harder, their bodies are stronger and they can do some of the shit I can't do anymore. I'm impressed with what I've seen. On the other hand there are those who go and do nothing—not committed—a big part of this, though, is education, or bad family life
	Baby Boomers on Millennials	They bring a lot of technological knowledge, in the newest part of the field, computer-type stuff. They love that. But physical labor they hate
Centrality of work	Millennials on Millennials	Sure some days I don't want to work. I'd rather work on cars, or play on the mountain, but I'd rather be doing this for work than something else. I do work to live, I prefer to think I live to work, but right now I am starting my life, I am working to live
	Gen Xers on Millennials	A lot of them still live at home. Every penny they make they don't have to spend, don't have responsibilities we do, they could care less. They think they can get hired anywhere. We never missed work. They're more lax. They call in sick, haven't been held accountable. Not disciplined, always trying to get out of work
	Baby Boomers on Millennials	Some of the youngest guys worked nonunion,…, figured every time they want a raise they have to negotiate. Now a light went on they get more from the union. Thos are the best ones now; they really know what a good thing they've got
Self reliance	Millennials on Millennials	Some people get handed too much. My experience was that you go out and work. You want something you go out and work for it. This teaches you to find out you like working with your hands and having responsibility
	Gen Xers on Millennials	Young kids today can't work on teams too well. They lack communication skills. I think it's from TV maybe, now they text message everything, they don't even have to talk anymore. You don't have to carry on a conversation, not face-to-face
	Baby Boomers on Millennials	Part of our curriculum teaches roles and responsibilities. A lot of us old timers resent this…They figure we shouldn't be teaching these kids how to balance a check book, figure out a budget. 90% think we have no business doing this. But the whole reason we do this is so they can get that house sooner, so many of these young kids we see have no sense when it comes to this stuff. We even show 'em how to read their paychecks, to make sure deductions are correct, the 401s are correct, to calculate the overtime if they have disputes about getting overtime
Gender issues	Millennials on Millennials MALE	The biggest problem, some of them take advantage of their femininity. "I can't do this, will you do it for me?" Some can work in the shop and not in the field. Maybe we need to put people where they can work the best, like women should be in the shop more, not in the field so much. There is a place for women in the trades. Maybe we should use women for what they bring: use women for putting in fuses, they can get into smaller places
	Millennials on Millennials FEMALE (F)	I don't get too much flak. The old guys are really cool they want to teach me, but the guys in their early forties give me a lot of shit. These guys are threatened. They think they have to be so careful because they think I'm gonna sue them all the time for sexual harassment, but it doesn't keep them from acting straighter with me. I don't want to be treated differently from anyone else. It takes about 2 weeks to get to know me and then they see I am just like everyone else. They need to know I am not going anywhere, and I am just as much a part of this union as they are
	Gen Xers on Millennials (F)	Being a woman and being queer in the trades, [I think Millennials] bring a more liberal attitude. They don't seem as phased by my choices. I don't flaunt it, if asked I'll tell. But still, I think kids are more used to this

Participants also had different perceptions of Millennials in the matter of self reliance. One Boomer described his efforts to help Millennials take care of themselves by teaching them basic "roles and responsibilities" (see Table 2). One Xer described his take on Millennials in the workplace: "Kids today play by themselves. We used to play in groups. If you walk into a new shop, it's intimidating. Team work is important; somebody needs help you ought to jump right in". A Millennial noted that his approach differed from that of older workers: "It's not that I know more than the baby boomers, I don't have more knowledge. I have new knowledge that is useful".

In summary, these comments suggest that these workers had a mixed view of Millennials' work ethic. Many Millennials saw themselves as hard working while their older brethren had mixed perceptions. A number of statements could be related to work experience, age, or stage of life rather than generation membership. This interpretation

supports the lack of practical significance in the quantitative findings for work ethic.

Job Values

Research question two involved the extent of differences between generations for job values. The multivariate test of overall differences show generational differences for job values (Pillai's Trace = .03; df = 4; $p < .001$). Univariate between-subjects tests indicate that both *intrinsic job features* and *social aspects of work* differed significantly by generation (see Table 1). Post-hoc tests show that Millennials scored higher than Boomers for *intrinsic job features*, with no differences found between Millennials and Generation X. Millennials scored higher in *social aspects of work* than both Generation X and Baby Boomers. These results, while statistically significant, were not meaningfully significant. There were no practical differences between Millennials' job values and those of other workers.

In the focus groups, a number of Millennials described how the skilled trades provided benefits in line with their own values, including "*a higher paid job*", "*good work*", work that is "*not boring*", and the opportunity to take "*pride in my own work*". Many Gen Xers indicated how Millennials were different than they were growing up, with many comments beginning with statements like, "*When I was growing up*", followed by a negative remark about Millennials. Boomers seemed to be more tolerant and wanted to focus on mentoring, as one noted: "A majority are somewhat motivated. To keep 'em interested I tell 'em about retirement, I tell 'em about my vacations, if it wasn't for work I couldn't do that. I show them the rewards, they can buy a house." To sum up, these comments were similar in nature to the statements about work ethic in that they were more related to age, experience or stage of life instead of generation.

Gender Beliefs

The third research question involved whether Millennials would have different attitudes and beliefs about gender than other generations. The multivariate test of overall differences show that generational differences existed for gender issues (Pillai's Trace = .019; df = 6; $p < .001$). Univariate between-subjects tests indicate that two of the gender issues scales differed significantly by generation (see Table 1). No differences existed between generations for *gender equity at home*. For the two scales in which differences did exist, post-hoc tests show that Millennials scored lower than both Generation X and Baby Boomers on *discrimination against women* (beliefs about the extent that women are discriminated against at work). Millennials also scored lower than both Generation X and Baby Boomers on *gender equity at work*. As with the first two research questions, these differences were too small to have any practical significance.

Gender discussions in the focus groups were wide-ranging and were raised primarily in the Millennial focus groups. Many Millennials were concerned that they may offend women co-workers or that some women may want preferential treatment (see Table 2). One Millennial asserted, "Lots want to be treated like a woman and not an equal. A man always has to worry about who he's gonna offend… Men talk and say s–t we're not supposed to…If a girl can take this and keep up, that's all I care about". Another Millennial suggested that it depends on the individual: "There are a lot who still want to be treated like a woman,' it's too heavy for me'. I do know a woman who can really pull her own weight. She hates the name journeywoman". As seen in Table 2, one Generation X worker asserted that Millennials were tolerant in their views.

The focus group comments about gender were a bit more limited than those of work ethic or job values but they do raise the question of whether the mixed quantitative results are of any practical significance. Additionally, one is left wondering whether more experience working with women would change the perceptions of these younger workers. In an industry that is 95% male, this may take some time. This may be why these Millennials appear to have unexpected views about gender in the workplace.

Discussion

The aim of this study was to examine whether generational differences exist among skilled workers within a single construction trade. Quantitative analyses of work ethics, job values, and gender beliefs found statistically significant differences between Millennials and other generations of workers. However, these differences were small and of little practical significance. Millennial workers were more similar to than different from other generations in their work-related values and beliefs. Those differences elicited in focus groups were more likely the result of experience, position, or age than of generation. Because this study used a random sample of workers drawn from all regions of the United States, it offers a substantial degree of external validity for the finding that skilled construction workers experience little meaningful generational differences in their work ethics, job values, and gender beliefs.

The results of this study are more in line with other recent scholarship, such as Wong et al. (2008), Cennamo and Gardner (2008), and Dries et al. (2008) that found few meaningful differences attributable to generation. While differences were found in this study, they were too slight to

be of practical significance. The multivariate test of overall differences did show differences, but Pillai's trace statistic, which can be interpreted as the proportion of variance in the linear combination of dependent variables that is explained by the independent variables (Tabachnick and Fidell 2006), was quite small. In this study, Pillai's trace ranged from .019 for gender, .03 for job values, and .161 for work ethic, suggesting that generation membership has only a weak association with the dependent variables. Furthermore, a look at the range in scores for mean differences (Table 1) indicates small differences. Even in the cases where the *F* statistic was relatively robust, the spread between group means were very small. For example, mean scores for morality/ethics (the largest *F*-value) only ranged from 4.14 at the low end to 4.26 at the middle to 4.48 at the high end (on a 1–5 point scale). As such, these 'differences', while statistically significant, are of little practical value.

The findings of this study offer a different view of Millennials than the stereotypes and sweeping assertions provided in media stories and popular management press. One reason for this may be the particular nature of the sample for this study. These skilled workers and apprentices are sociologically distinct from other blue-collar workers (Applebaum 1998). Particular crafts in the building trades are occupational communities in which young workers are introduced to their occupation through apprenticeship and training (Van Maanen and Barley 1984). The skilled construction crafts are characterized by a number of factors that distinguish them from other manual-oriented occupations. These include having control over entry into the skill or craft through unions and organizations, a sense of craft-related pride and accomplishment in the quality of work, and a belief that working in the trades is a privilege earned through apprenticeship, training and education (Applebaum 1998). These occupational communities are characterized by lengthy worker training and significant occupational power (Applebaum 1998; Van Maanen and Barley 1984). Future research may want to examine how these occupational communities develop and maintain social capital and networks as they address the challenges of globalization, worker safety, and changing work modalities.

Craft workers may also develop beliefs about working in the unionized building trades when they are younger through family and other influences (Kelloway and Watts 1994). Indeed, in this study a majority (55%) of the workers reported having a relative in construction and it was even higher for Millennials (63%). Many of these younger workers may have been socialized into these occupational communities in their home, neighborhood, and social class while in their formative years, thus learning the values, norms, and practices associated with construction crafts. This may explain why these Millennials chose union membership in the face of declining opportunities for union workers in general and construction in specific in the U.S. (Belman and Voos 2006). It could also explain the similarities in work-related gender beliefs. Millennials in this male-dominated craft (and sample) may be more similar to each other than to Millennials outside their occupational community. Having been socialized into a particular community, they now hold similar beliefs. Those gender belief differences drawn out in focus groups were likely the result of experience, age, and maturity, as older workers tended to be less concerned about working with women than did their younger counterparts. Future studies could examine how these workers come to their beliefs and the extent to which they arise out of social class and social interaction.

Practical Implications

The findings of this study suggest that construction firms should avoid policies and procedures based on generational differences for their skilled trade workers. Instead, organizations should focus on practical strategies directed toward communicating and working with younger workers. Given the plethora of advice available in regard to workplace communication and younger workers, much of it based more on myth than research, it is critical that empirical researchers offer practical applications. Based on our combined experience in construction management and communication science, we contend that communication is crucial to success in working with and understanding these highly skilled workers.

First, it is important to establish well-defined, specific work rules that can be conveyed using different communication channels. Using multiple channels can increase exposure and reinforce the message for some individuals as well as deliver it to those who missed it in another medium (Real 2008; Salmon and Atkin 2003). When Millennials engage messages in different ways (watch it, hear it, read it), they are more likely to understand them. Knowing what is expected of them will enable Millennials to understand and meet seemingly mundane expectations regarding attendance, punctuality, cell phone use, and more. Second, it is important for front-line supervisors and key older workers to develop good interpersonal relationships with Millennials and, where possible, develop mentoring relationships. Millennial workers will better understand how to achieve their goals if they have access to institutional knowledge that older craft workers can offer them.

Third, it is important that supervisors, many of whom are journeymen themselves, take the time to give details of job requirements and how they fit into the big picture. This includes explaining how work that may be seen as 'scut

work' has a valuable place in the job (e.g., site clean-up is not punishment or grunt work but necessary to providing a safe workplace by eliminating hazards). Fourth, organizations should encourage supervisors (and mentors) to provide feedback and rewards to motivate Millennials. When appropriate, this feedback should be frequent, accurate, specific, timely with some degree of sensitivity to both the valence of the messages and the recipient's willingness to receive it (Cusella 1987). It may also be useful to provide a variety of rewards, including praise, change in job assignments, and flexible scheduling arrangements for these workers. Although Millennials do not need preferential treatment, it is important that organizations understand that strategic approaches to working with this generation will likely result in improved outcomes.

A number of potential limitations of the current study need attention. First, the cross-sectional study design was not ideal for assessing this phenomenon. Designs that compare generational groups over time would more appropriately address the nature of these differences. A second limitation involves the low response rate to the mail survey. However, given that less than 2% of journey-level workers were Millennials, this limitation was restricted in scope and likely did not affect the results. A third limitation was that the sample was 95% male, thus reducing the generalizability of this study. However, the sample does correspond to the proportion of males working in this trade as reported by Menches and Abraham (2007).

Despite the limitations, this study revealed findings that have both theoretical and practical significance. Findings of this study also raise questions for future research. One area would be to understand why more women are not working in this field. Certainly there are women who would want to learn a trade and support themselves and their families. It could be that women who come from the same social milieu as the male craft workers may have received a number of cultural messages advising them not to select this particular occupational path. At the same time, researchers need to examine the barriers in place within the occupational community itself that prevent the successful entry of women into the trades. More research is needed to address this important question.

Conclusion

This study, one of the first large-scale investigations of Millennial workers in the building trades, makes a number of contributions to the literature on generations and work ethic. The findings reveal that Millennials were mostly similar to other generations of workers within their industry in their work ethics, job values, and gender beliefs. It corresponds to a number of other studies that conclude that any differences found were likely more related to age, experience, maturity, or stage of life rather than generation. This study highlights the need for understanding and studying skilled workers in specific occupational communities. The results point to the importance of social class and other factors in understanding Millennials. These workers are different from the college students or white-collar workers used in much prior generational research.

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